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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,127	04/26/2001	Reginald C. Shiverick	2589-101	6542
6449 7590 02/07/2008 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005				
			EXAMINER TO, BAOQUOC N	
			ART UNIT 2162	PAPER NUMBER
			NOTIFICATION DATE 02/07/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/842,127	SHIVERICK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Baoquoc N. To	2162	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 and 34-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-32 and 34-36 is/are allowed.
- 6) ☒ Claim(s) 1-2, 5-14 and 37-48 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1, 3-4, 9-10, 37, 43 and 47 are amended 11/23/2007. Claims 1-32 and 34-38 are pending in this application.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1 and 37 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues "sawyer fails to disclose generating a data item count for each selected data grouping as recited by claims 1 and 37."

The examiner respectfully disagrees with the above argument. Sawyer discloses after adding a criterion to a filter the system generate a list of items that meet all of the criteria in the filter as shown in block 222 (col. 4, lines 50-51). In this passage, there is a suggestion that the list of items presents a data item count as applicant claimed. To further clarify the rejection, examiner provides a secondary reference (Holbrook) to include the data item count for example, the query is searched and the result is returned with number of sites (the window 202 in this particular embodiment shows tow textual alternative from which the user selects, either the first numerically ranked matching "1-50 sites", "1-100 sites" (not shown) or "all" (not shown), per search to be displayed. Different quantities of search results or different format or sites to e presented can be sued...) (col. 11, lines 1-10).

Applicant argues "applicant disagrees Sawyer's portfolio 370 is merely a list of data items that meets his filter's search criteria..."

The examiner respectfully disagrees with the above argument. As discloses in Sawyer "to obtain information, server node 100 may communicate with third party database (not shown) via WAN 102 via a direct connection (col. 2, lines 65-67). This suggests the number of records is changed if the information is updated.

Applicant argues "applicant disagrees Sawyer's portfolio 370 is a list of filtered data (col. 4:34-62), which is not the claimed filter tree table...).

The examiner respectfully disagrees with the above argument. In fig. 3, discloses person 20+, 324 hotland, 322..in fig. 3 indicate the tree which corresponding to the column of data in database 106 (col. 2, lines 61-64).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-2, 5-12, 14, 37-40 and 42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawyer (US. Patent No. 7,080,328 B1) in view of Holbrook (US. Patent No. 7,054,870 B2).

As to claim 1, Sawyer teaches a computer-implemented information filtering method, comprising the steps of:

Accepting a user input for selecting or de-selecting at least one of a plurality of data groupings within a filter tree table (the criteria added to each filter tier may be indicated by a user by a mouse click or other user input device and may then be added to the filter by dragging and dropping via the mouse or other input device or technique via well known in the art.) (col. 4, lines 38-42), said data grouping being associated with a plurality of data items in an unfiltered data table (the criteria associated with a plurality of securities information and equities information in database 106) (col. 2, lines 1-3);

Generating a filtering query, including at least one query operator, based on the said at least one data grouping selected from said plurality of data groupings (after the particular criterion has been added to a filter, the criterion is applied by the system, as shown in block 218) (col. 4, lines 46-48);

Running a filter query against said unfiltered data table (the criterion is applied by the system, as shown in block 218) (col. 4, lines 46-48);

Receiving a plurality of filtered data items from said unfiltered data table in response to said filtering query (the system then generates a list of items that meet all of the criteria in the filter, as shown in block 222) (col. 4, lines 50-51);

Creating a filtered data table with said plurality of filtered data items (the generated list of items in response to the criteria is the portfolio 37) (fig. 3, col. 4, lines 59-61); and

Display said filtered data table (portfolio 370) and said filter tree table (filter builder, 372) (fig. 3).

Sawyer does not explicitly teach generating a data item count for each selected data grouping; however, Holbrook teaches generating a data item count for each selected data grouping (the window 202 in this particular embodiment shows tow textual alternative from which the user selects, either the first numerically ranked matching "1-50 sites", "1-100 sites" (not shown) or "all" (not shown), per search to be displayed. Different quantities of search results or different format or sites to e presented can be sued...) (col. 11, lines 1-10). The concept of retrieving the results based on a query is similar to the concept of filtering because in both concepts the purpose is to getting the small the set of records from the lager set of record. Furthermore, the retrieving also produces the number of records (i.e. counts as applicants claimed) for each search result. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Sawyer's teaching to include search result counts as disclosed by Holbrook in order to allow the user to see how many record to be look at in term or relevancy.

As to claim 2, Sawyer teaches the method of claim 1, further comprising the steps of:

Selecting one or more data sets automatically or in response to a user input the system continue to receive criteria (after criterion being added to the filter, the criterion is applied by the system) (col. 4, lines 34-48 and lines 63-57);

Receiving a plurality of data items from said one or more data sets (the system generate the list of items that meets all of the criteria in the filter as shown in block 222) (col. 4, lines 50-52 and col. 4, lines 63-67);

Creating said unfiltered data table based on said plurality of data items (the filter tree is also the unfiltered database on select filter) (col. 4, lines 53-67);

Displaying said unfiltered data table (filter tree is also an unfiltered data table) (filter builder, fig. 3 and col. 4, lines 63-67); and

Updating said filter tree table with selectable data groupings associated with said plurality of data items (to obtain information, server node 100 may communicate with third party database (not shown) via WAN 102 via a direct connection) (col. 2, lines 65-67) (fig. 2-3 and col. 3, lines 65-67),

As tot claim 5, Sawyer teaches the method of claim 1, further including a preliminary step of selecting a data set (the data in the database 106 as the population of data items are being selected for filter) (col. 4, lines 52-53).

As to claim 6, Sawyer the method of claim 1, wherein said data set comprises a database (database 106) (col. 2, lines 63-65).

As to claim 7, Sawyer teaches the method of claim 1, wherein said data set comprises data table (relational database such as an Oracle-style database or may include one or more such databases contains table by genetic definition) (col. 2, lines 63-65).

As to claim 8, Sawyer teaches the method of claim 1, wherein a first level of said filter tree table corresponds to a column in said data set (each level tree table corresponding to the column of data in the database 106) (col. 2, lines 61-65).

As to claim 9, Sawyer teaches the method of claim 1, excepting for further including the steps of displaying the data item count for a particular data grouping. However, Holbrook discloses steps of displaying the data item count for a particular data grouping (the window 202 in this particular embodiment shows tow textual alternative from which the user selects, either the first numerically ranked matching "1-50 sites", "1-100 sites" (not shown) or "all" (not shown), per search to be displayed. Different quantities of search results or different format or sites to e presented can be sued...) (col. 11, lines 1-10). The concept of retrieving the results based on a query is similar to the concept of filtering because in both concepts the purpose is to getting the small the set of records from the lager set of record. Furthermore, the retrieving also produces the number of records (i.e. counts as applicants claimed) for each search result. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Sawyer's teaching to include search result counts as disclosed by Holbrook in order to allow the user to see how many record to be look at in term or relevancy.



As to claim 10, Sawyer teaches the method of claim 1 excepting for further including the step of updating all data item counts upon a data grouping selection or de-selection by said user. However, Holbrook discloses the step of updating all data item counts upon a data grouping selection or de-selection by said user (the user can enter different search string or select a different quantity of search results than previously entered and selected, execute a new search and view the corresponding, search results. For example, items 201, 202,203, 204 can be included on numerous or every unique web page or screen provided to the user (see e.g. FIGS. 4, 5, 6, 8, 22 23, and 24)) (col. 11, lines 32-39). This suggests a different search string or modified search string will yield different result in the result counts as to updating the counts based on the selection or de-selection of groupings. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Sawyer's teaching to include a different search string or modified search string will yield different result in the result counts as disclosed by Holbrook in order to allow the user to see how many record to be look at in term or relevancy.

As to claim 11, Sawyer does not explicitly teach the method of claim 1 wherein all data grouping are automatically recalculated upon a selection or de-selection by said user. However, Holbrook discloses all data grouping are automatically recalculated upon a selection or de-selection by said user (the user can enter different search string or select a different quantity of search results than previously entered and selected, execute a new search and view the corresponding, search results. For example, items 201, 202,203, 204 can be included on numerous or every unique web page or screen

provided to the user (see e.g. FIGS. 4, 5, 6, 8, 22 23, and 24)) (col. 11, lines 32-39).

This suggests a different search string or modified search string will recalculated the number matched results and output to the user as to all data grouping are automatically recalculated upon a selection or de-selection by said user. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Sawyer's teaching to include a different search string or modified search string will recalculated the number matched results and output to the user as disclosed by Holbrook in order to allow the user to see how many record to be look at in term or relevancy.

As to claim 12, Sawyer teaches the method of claim 1, wherein said generating a filtering query steps includes creating said filtering query based on selected data groupings (the data groupings are selected the system interpret and generate the filter query) (this step is inherent) (col. 4, lines 34-42).

As to claim 14, Sawyer teaches the method of claim 1, wherein said user input includes clicking on a selection icon corresponding to a predetermined data grouping (select or drag and drop) (col. 4, lines 33-42).

As to claim 37, teaches the information filtering apparatus, comprising:

A processor (processor) (col. 3, line 5)

A user interface, communicating with said processor, to interface with a user (inherently there is a interface between the processor and user) (col. 3, lines 1-7);

An unfiltered data table, communicating with said processor, to store one or more data items (database 114 stores unfiltered data) (col.3, lines 35-40);

A filtered data table, communicating with said processor, to store one or more filtered data items (portfolio 370) (fig. 3);

A filter tree table, communicating with said processor, to store one or more data groupings associated with said data items (filter builder, 372) (fig. 3),

Wherein said processor executes instructions to perform a filtering method (the software executed to perform the filter) (col. 3, lines 5-18), said filtering method including:

Receiving a user input, from said user interface for selecting or deselecting at least one of said data groupings in said filtered tree table (the criteria added to each filter tier may be indicated by a user by a mouse click or other user input device and may then be added to the filter by dragging and dropping via the mouse or other input device or technique via well known in the art.) (col. 4, lines 38-42),

Generating at least one filtering query based on said at least one selected data groupings (the data groupings are selected the system interprets and generates the filter query) (this step is inherent) (col. 4, lines 34-42),

Running said filtering query against said unfiltered data table (the criterion is applied by the system, as shown in block 218) (col. 4, lines 46-48),

Filtering said filtered data table with filtered data items from said unfiltered data table (the generated list of items in response to the criteria is the portfolio 37) (fig. 3, col. 4, lines 59-61);

Displaying said filtered data table (portfolio 370) and said filter tree table using said user interface (filter builder, 372) (fig. 3).

As to claim 38, Sawyer teaches the apparatus of claim 37, wherein said processor, said unfiltered data table, said filtered data table and said filter tree table are hosted by a data server accessible to a plurality of clients in a client-server arrangement (server node 100) (col. 2, lines 22-49).

As to claim 39, teaches the apparatus of claim 37, wherein said processor, said unfiltered data table, said filtered data table and said filtered tree table are hosted by a user computer that includes input and output devices (server node 100) (col. 2, lines 22-49).

As to claim 40, Sawyer teaches the apparatus of claim 37, further comprising a data source interface (interface) (col. 54-57), communicating with said processor (processor) (col. 2, line 39), to receive data from one or more external data sources (the client system receives data from server 106 or any other database servers) (col. 2, lines 30-49).

As to claim 42, Sawyer teaches the apparatus of claim 37, further comprising at least one internal data source communicating with said processor (database 100) (col. 61-67).

As to claim 43, teaches the apparatus of claim 37, wherein said filtered tree table stores data item counts corresponding to each data grouping (each filter added or selected the filter data populate the portfolio 370) (fig. 3).

As to claim 44, Sawyer teaches the apparatus of claim 37, wherein said filtered tree table stores data item results corresponding to each data grouping (portfolio populated with each filter) (fig. 3).

As to claim 45, Sawyer teaches the apparatus of claim 37, wherein said processor a display of one or more data items corresponding to selected data grouping in said filter tree table (tier #1 having NASQ and AMEX) (fig. 3).

As to claim 46, Sawyer teaches the apparatus of claim 37, wherein said processor generates a display of parameter filter comprising data groupings stored in said filter tree table (fig. 3).

As to claim 47, Sawyer teaches the apparatus of claim 37, wherein said processor generates a display of a parametric filter comprising data groupings and data items results stored in said filtered tree table (fig. 3).

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sawyer (US. Patent No. 7,080,328 B1) in view of Holbrook (US. Patent No. 7,054,870 B2) and further in view of Robinson (US. Patent No. 5,842,218).

As to claim 13, Sawyer and Holbrook teach the system use the relational database; however, Sawyer does not explicitly teach the method of claim 1, wherein said filtering query is a SQL query; however, Robinson teaches SQL database (col. 11, lines 56-67). Therefore, it would have been obvious to one ordinary skill in the art at the of the invention was made to modify the teach of Sawyer and Holbrook to include the SQL Database as taught by Robinson to allow any retrieve and sort without having the command to be translated or converted to the Relational database.

5. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sawyer (US. Patent No. 7,080,328 B1) in view of Boothby et al. (US. Patent No. 6,212,529 B1)

As to claim 41, Sawyer teaches the apparatus of claim 37, further comprising a data source interface (interface) (col. 54-57), communicating with said processor (processor) (col. 2, line 39), to receive data items from one or more external data sources (the client system receives data from server 106 or any other database servers) (col. 2, lines 30-49); however, Sawyer does not explicitly teach to translate said received data items into a predetermined data format. However, Boothby teaches to translate said received data items into a predetermined data format (as corresponding to during unloading, the unloader module of L\_translator uses the remote database to local database map to map the records in the workspace back into the format of local database records" (col. 19, lines 25-28). This suggests translating the remote records into the local records for filtering. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Sawyer's system to include translating the remote records into the local records as taught in Boothby in order to allow the data to be in a comparable format to be processed in the filtering system.

***Allowable Subject Matter***

6. Claims 3-4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. Claims 15-32 and 34-36 are allowed over prior made of records.

The following is an examiner's statement of reasons for allowance:

As to claims 15 and 25, examiner agrees with applicant argument filed on 11/23/2007 such as "Sawyer fails to disclose generating a summary result that includes a data item count for each user-selected data grouping, as recited by Claims 15 and 25..." on page 11 and "generating a summary query based on the selected data groupings, running the summary query against the filtered data table, generating summary results including a data item count for each selected data grouping and updating the filter tree table with the summary results..." on page 12.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-

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4041, or unofficial fax number for the purpose of discussion (571) 273-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

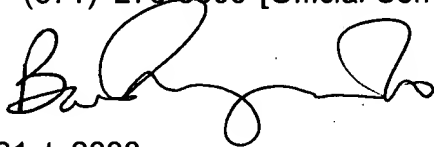
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(571) 273-8300 [Official Communication]

BQ To

A handwritten signature in black ink, appearing to be 'Baoquoc N. To', written over the text 'BQ To'.

January 31st, 2008